Hazard Communication

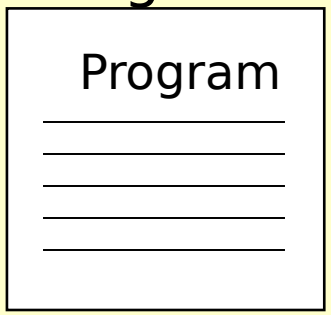
Introduction

- About 32 million workers work with and are potentially exposed to one or more chemical hazards
- There are approximately 650,000 existing chemical products, and hundreds of new ones being introduced annually
- Chemical exposure may cause or contribute to many serious health effects such as heart ailments, central nervous system damage, kidney and lung damage, sterility, cancer, burns, and rashes
- Some chemicals may also be safety hazards and have the potential to cause fires and explosions and other serious accidents

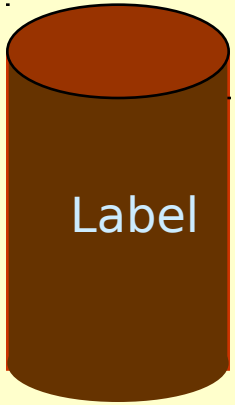
Purpose of OSHA's Hazard Communication Standard

To ensure that employers and employees know about work hazards and how to protect themselves so that the incidence of illnesses and injuries due to hazardous chemicals is reduced.

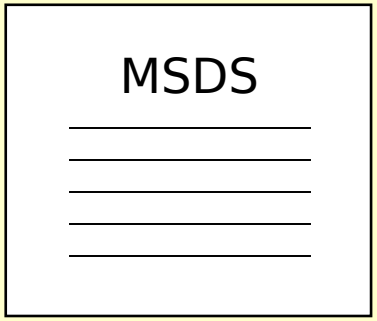
Hazard Communication Program



Container Labeling



Material Safety Data Sheet



Who is covered?

OSHA's Hazard Communication (HazCom) standard applies to general industry, shipyard, marine terminals, longshoring, and construction employment and covers chemical manufacturers, importers, employers, and employees exposed to chemical hazards.

Employer Responsibilities

- Identify and list hazardous chemicals in their workplaces
- Obtain Material Safety Data Sheets (MSDSs) and labels for each hazardous chemical, if not provided by the manufacturer, importer, or distributor
- Implement a written HazCom program, including labels, MSDSs, and employee training
- Communicate hazard information to employees through labels, MSDSs, and formal training programs

How can workplace hazards be minimized?

- The first step in minimizing workplace hazards is to perform a thorough hazard assessment
- Employers can rely on the evaluations performed by the manufacturers or importers to establish the hazards of the chemicals they use
  - This information is obtained from MSDSs and labels

Why is a written program required?

- Ensures that all employers receive the information they need to inform and train their employees
- Provides necessary hazard information to employees

Written HazCom Program
Requirements

- Describes container labeling, MSDSs, and employee training for each workplace
- List of the hazardous chemicals
- Make information regarding hazards and protective measures available to other employers onsite

How must chemicals be labeled?

Each container of hazardous chemicals entering the workplace must be labeled or marked with:

- Identity of the chemical
- Appropriate hazard warnings
- Name and address of the responsible party

Container Labeling in the Workplace

- The hazard warning can be any type of message, picture, or symbol that provides information on the hazards of the chemical(s) and the targeted organs affected, if applicable
- Labels must be legible, in English (plus other languages, if desired), and prominently displayed

Material Safety Data Sheets

Prepared by the chemical manufacturer or importer and describe:

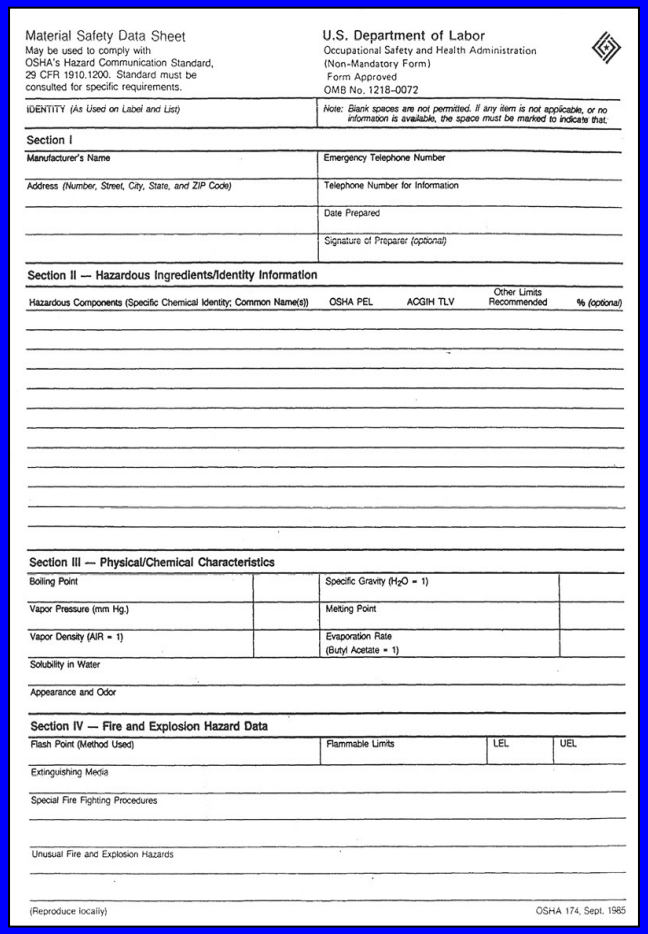
- Physical hazards, such as fire and explosion
- Health hazards, such as signs of exposure
- Routes of exposure
- Precautions for safe handling and use
- Emergency and first-aid procedures
- Control measures

Material Safety Data Sheets (cont'd)

- Must be in English and include information regarding the specific chemical identity and common names
- Must provide information about the:
  - Physical and chemical characteristics
  - Health effects
  - Exposure limits
  - Carcinogenicity (cancer-causing)
  - Identification (name, address, and telephone number) of the organization responsible for preparing the sheet
- Must be readily accessible to employees in their work area

Material Safety Data Sheets (cont'd)

- MSDSs have no prescribed format
- If no MSDS has been received for a hazardous chemical, employer must contact the supplier, manufacturer, or importer to obtain one and maintain a record of the contact



Material Safety Data Sheet
May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY *(As Used on Label and List)*

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name	Emergency Telephone Number
Address *(Number, Street, City, State, and ZIP Code)*	Telephone Number for Information
	Date Prepared
	Signature of Preparer *(optional)*

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% *(optional)*

Section III — Physical/Chemical Characteristics

Boiling Point		Specific Gravity (H_2O = 1)	
Vapor Pressure (mm Hg.)		Melting Point	
Vapor Density (AIR = 1)		Evaporation Rate (Butyl Acetate = 1)	

Solubility in Water

Appearance and Odor

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL

Extinguishing Media

Special Fire Fighting Procedures

Unusual Fire and Explosion Hazards

(Reproduce locally) OSHA 174, Sept. 1985

Training

Training is required for employees who are exposed to hazardous chemicals in their work area:

- At the time of initial assignment
- Whenever a new hazard is introduced into their work area

What training is needed to protect workers?

- Explanation of the HazCom program, including information on labels, MSDSs, and how to obtain and use available hazard information
- Hazards of chemicals
- Protective measures such as engineering controls, work practices, and the use of PPE
- How to detect the presence or release of a hazardous chemical (using monitoring devices, observation, or smell)

What information must be provided to workers?

Employees must be informed of:

- The HazCom standard and its requirements
- Operations in their work areas where hazardous chemicals are present
- Location and availability of the written hazard evaluation procedures, communications program, lists of hazardous chemicals, and the required MSDSs

Summary

- OSHA's Hazard Communication Standard is based on a simple concept - that employees have both a need and a right to know the hazards and identities of the chemicals they are exposed to when working
- Employees also need to know what protective measures are available to prevent adverse effects from occurring